# This is not an advertisement. Marina Management System

Miami-Dade County, Florida

RFP No. "TBD"

## **ISSUED BY MIAMI-DADE COUNTY:**

Information Technology Department

\*\*Vendor Conference call is scheduled for October 16, 2014

\*\*Time: 9:00 A.M. - 10:00 A.M.

\*\*Conference bridge #: 1.800.501.8979, conference ID 4872052

## **COUNTY CONTACT FOR THIS SOLICITATION:**

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### **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

#### 2.1 INTRODUCTION

Miami-Dade County, hereinafter referred to as the County, as represented by the Miami-Dade Information Technology Department, hereinafter referred to as ITD, is soliciting proposals for a Marina Management System that will automate operations at our six marinas, Bill Bird Marina, Black Point Park and Marina, Crandon Marina, Herbert Hoover Marina, Matheson Marina, and Pelican Harbor Marina.

Miami-Dade County wishes to acquire an Enterprise Solution to be used county-wide for Marina Management. Some of the primary functions of the system will be waiting list management, accounts receivable, boat slip management, and billing. The solution is expected to incorporate and enhance current workflows from existing application and manual procedures that will expedite the current business processes and facilitate data sharing and reporting.

#### 2.2 BACKGROUND

In 2003 ITD began development of an ASP web application to be deployed at County owned marinas to centralize the rolling slip waiting list, accounts receivable, slip management, and billing for boat slips and services. This system was significantly revised between 2007 and 2008. This revision removed most of the billing operations from the web application and transferred it to a new system. The goal was to enhance the security of automatic recurring payments, to remove all stored credit card numbers from the Marinas database, and to discontinue the use of the billing vendor, EZ Pay in favor of the County's self-managed payment gateway.

#### 2.3 CURRENT PROCESSES

This section of the document provides an overview of each marina business process.

- 1. Maintaining Waiting List
  - Request waiting list application and/or information.
  - Determine eligibility of application request.
  - Submit waiting list application and fees.
  - Inform patron of ineligibility and return/refund application fees.
  - Add patron information to marina(s) waiting list.
  - Contact patron and offer annual slip.
  - Process a new annual berth permit.
  - Update occurrence of declined offer.
  - Patron mobility on waiting list.

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### **Marina Management System**

#### Miami-Dade County, Florida

- 2. Processing new berth permits
  - Verify patron boat information.
  - Verify non-delinquent status.
  - Calculate monthly fees.
  - Complete berth permit.
  - Collect deposit fees.
  - Marina management reviews and validates berth permit.
  - Update berth permit with corrected fees.
  - Marina explains corrections and patron initials and agrees to changes.
  - Approve a new annual berth permit.
  - Process monthly fees.
  - Remove patron from waiting list.
- 3. Renewing existing berth permits
  - Identify annual permits needing a renewal.
  - Mail patron renewal packet.
  - Review completed renewal permit requirements.
  - Mail patron reject letter.
  - Mail patron second notice.
  - Mail final notice via certified letter.
  - Process expired annual berth permits.
  - Process approved renewals.
  - Process monthly fees.
- 4. Processing transient slip requests
  - Process patron request.
  - Determine if discount/promotional rates are applicable.
  - Determine rates and calculate fees.
  - Collect fees.
  - Complete transient dockage permit.
  - Process refunds/credits.
  - Process delinquent patrons.
- 5. Managing boat/slip movement
  - Dry storage (not in the water)
  - Wet slips (in the water)
  - Mooring buoys

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### **Marina Management System**

#### Miami-Dade County, Florida

RFP No. "TBD"

- Temporary floating docks or seawalls
- Dock checks
- Optimize boat storage areas
- 6. Processing boat ramp passes
  - Daily boat ramp pass
  - Obtain annual boat ramp pass process.
- 7. Processing landing fees
  - Private patron landing fees process.
  - Commercial landing fees process
- 8. Processing Delinquent Accounts
  - Delinquency reasons:
    - A patron fails to pay their monthly fees (after 2 months) for their annual berth permit.
    - o A patron fails to renew their annual berth permit (after 2 months).
    - o A transient patron violates their transient dockage permit
  - Process annual patrons failing to pay their monthly fees.
  - Process annual patrons failing to renew their permits.
  - Process transient patrons that have violated their permit.
- 9. Processing point of sales (POS)
  - Collect waiting list application fees.
  - Collect new berth permit annual fees.
  - Collect annual berth monthly fees.
  - Collect transient fees.
  - Collect marina merchandise fees.
  - Collect boat ramp fees.

#### 2.4 CURRENT AUTOMATED SYSTEMS

- Marina Web This application is used by personnel to conduct business at their marina.
  It is an ASP web application and is the primary tool used to interface with the marinas database.
- 2. Marina Crypto This is a windows application that is used to process recurring credit card payments. It interfaces with Miami-Dade County's payment gateway and makes use of our payment processor's tokenization so as to avoid stored credit card numbers. This system is PCI Level 3 compliant.

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### **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

#### 2.5 OBJECTIVES

The County is looking for a commercial "off-the-shelf" configurable solution to achieve the objectives listed below and more effectively automate the management of its marinas. The solution and supporting infrastructure will reside and be maintained at the Regional Data Processing and Communication Center (RDPCC), MDC's data center, operated by ITD. ITD is the central technology provider for Miami-Dade County and oversees the use of existing and emerging technologies in support of County government operations and services to the public. The solution will be used by marina staff and administrators in these business processes. The proposed solution must be delivered, installed, and operational (GoLive) for all stakeholders with final acceptance within three (3) years of the contract award.

# 2.6 <u>MINIMUM SOFTWARE, HOSTING, TECHNICAL, MAINTENANCE SUPPORT, AND TRAINING REQUIREMENTS</u>

2.6.1 Minimum Application Software and Application Configuration Services Licenses

Proposer's proposal shall include software license(s) to accommodate the estimated number of Users as listed below. The County shall not purchase separately licenses for third party applications which are embedded into the solution. All licenses that may be required by the solution for third party software are to be included with the proposed solution.

If the proposed solution requires third party software licenses not embedded into the solution in order to meet the technical and functional requirements of this solicitation, the County reserves the right to leverage software license agreements that may be in place between any proposed third party software copyright holders. This entitles all parties included as "Users" for this solicitation, with the advantage of reducing software acquisition or maintenance costs. ("Users" includes other entities in addition to the County).

Based on the current system there will be an estimated 40 users of the new system. This estimate is subject to change at any time before, during, or after implementation of the proposed system.

The proposed solution **shall** be a generally available product which has already been fully implemented at minimum one other government site for a minimum of six months.

2.6.2 Minimum Infrastructure and County Hosting Requirements

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### **Marina Management System**

### Miami-Dade County, Florida

RFP No. "TBD"

The solution will be hosted at the County's data center, operated by ITD. Proposers are required to meet the Miami-Dade County Technology Model and Hosting Requirements as defined in Appendix I.

### 2.6.3 Minimum Maintenance Support Services Requirements

#### A. Maintenance Support Agreement

Proposer shall include their Software Maintenance Support Agreement and the cost for year two of the initial term and for the five (5) two-year periods of optional software maintenance support on a year-to-year basis, as separate line items, in Form B-1 along with the Proposal Submission Package. The Maintenance Support Agreement shall take effect after the Warranty period and commence on the 1st day of the 13th month after the date of the Certificate of Acceptance.

#### B. Standard Software Maintenance Services

- 1. All software must be of the most recent release and all software upgrades issued by the Licensor must be available to the County at no additional charge. The software maintenance plan shall include the option of installation of new releases by the licensor.
- 2. Corrections of substantial defects in the Software ("System") so that the System will operate according to specifications to be resolved as Severity Level 1 (See Section 2.8.2).
- 3. Periodic updates of the System may incorporate:
  - a. Corrections of any substantial defects;
  - b. Fixes of any minor bugs; and,
  - c. Fixes due to any conflicts with mandatory operating system security patches, to be resolved as Severity Level 1; and,
  - d. Licensor enhancements made to any system components that MDC has licensed.
- 4. Updates to the system must be provided as determined by legally mandated requests.
- 5. Remote Server Access to any County server providing the application services either by Citrix SSL VPN, Encrypted Connection, or dedicated IP address; access will require prior approval from Miami-Dade County.

#### This is not an advertisement.

### **Marina Management System**

#### Miami-Dade County, Florida

RFP No. "TBD"

6. Maintenance of other non-production County environments, such as test, development, and staging, will be included as part of support.

#### 2.6.4 Minimum Configuration

Proposers shall include in their proposal response their methodology for discovering and collecting all information needed to configure the proposed solution. Cross-reference any attached documentation in the response which applies to this solution configuration.

#### 2.6.5 Minimum Data Conversion

Proposers shall include in their proposal response their methodology and technology tools enabling data mapping, data extraction, transformation, and loading of external system data to the proposed solution data structure/database. Cross-reference any attached documentation in the response which applies to this data conversion.

#### 2.6.6 Minimum Training

Proposers shall include in their proposal response training classes:

- For approximate 40 users.
- "Train the trainer" option for estimated 3-5 trainers.

#### 2.7 FUNCTIONAL REQUIREMENTS

Proposers are required to complete the chart below indicating whether their Proposed solution meets, or does not meet, the functional requirements listed below.

In order for the County to understand how Proposers intend to deliver the identified requirements, the Proposer's response shall classify how the requirement is met by specifying the appropriate response code as defined below in the Response column of the chart below. In your proposal response you are to clearly define and provide screen shots, examples, etc. as applicable to your solution.

Comments that further clarify how the requirement is met should be included in the Response Comments column as well as your proposal response. The below table is to be included with your Proposal Submission package as further outlined in Section 3.0 "Proposal Submission Package".

#### This is not an advertisement.

### **Marina Management System**

#### Miami-Dade County, Florida

RFP No. "TBD"

- "Y" "Yes" Requirement will be <u>FULLY</u> met with the proposed solution (without code customizations, additional scripting, or additional code).
- "V" "Vendor" If the proposed solution requires third party software or services to fully meet the requirement, please include documentation showing how the Proposer will fulfill the request, including any alliances with other suppliers or use of third party software.
- "N" "No" Requirement will not be met and why. A blank or N/A in any box will be interpreted as an "N". This will not automatically disqualify the Proposer's response.
- **"G" "Configuration" –** Subject matter expertise on the proposed solution is required in order to configure the solution to meet the requirement. In the Proposal response, please in detail the nature of the configuration. Cross-reference any attached documentation in the response.
- **"F"- "Future"-** Indicates that the requested functionality will be released with next major update to the solution. Proposer must include the anticipated date of availability.
- **"C" "Custom" -** Indicates that the requested functionality can be accommodated through a software customization. In the Proposal response, please provide a proposed start date, completion date, and any additional costs associated with the development of the request. Cross-reference any attached documentation in the response. Customizations typically should only apply to County specific integrations.

A Proposer awarded a contract as a result of this, agrees to comply with all County requests relating to the verification of compliance to Section 2.0.

# This is not an advertisement.

# **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

# 2.7.1 Marina Management System Solution Requirements

#	Feature Description	Response (Y, V, N, G, F, C)	Module/Detailed Explanation
1	Manage multiple marinas and generate reports from one central location.		
2	Provide flexibility to apply industry and county standards, such as changes to taxes and rates.		
3	Interface with the County's payment gateway.		
4	Interface with the County's financial system (FAMIS)		
5	Generate custom reports.		
6	WEB FUNCTIONS		
6.1	Provide online access to patron's accounts.		
6.2	Make a payment over the internet.		
6.3	Apply to berth permits online.		
6.4	Make a slip reservation.		
6.5	View your placement on the waiting list.		
7	REVENUE ACCOUNTING FUNCTIONS		
7.1	Process receipts, security and key deposits, refunds, wait list application fees, and have the ability to add other fees in the future.		
7.2	Interface with the PROS Accounts Receivable system.		
7.3	Generate custom reports on demand. I.e. dunning letters and other collection reports.		
8	RECEIVABLE ACCOUNTING FUNCTIONS		
8.1	Manual and repetitive invoicing.		
8.2	Credit and debit adjustments to accounts.		

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# **Marina Management System**

Miami-Dade County, Florida

8.3	Application of payments to accounts with batch processing to post payments to appropriate general ledger account(s) according to site where received.	
8.4	Account aging.	
8.5	Automatic generation and posting of late charges.	
8.6	Processing of security and key deposits to include tracking, transferring, releasing or applying to account.	
8.7	Issuance of refunds.	
8.8	Generation of customer statements.	
9	RECURRING CREDIT CARD PAYMENTS	
9.1	Ability to flag and un-flag patron accounts for automated credit card payments and allow entry and maintenance of credit card information.	
9.2	Generate monthly credit card transactions in the amount of each patron's monthly recurring charges for submission to the merchant clearing house.	
9.3	Process monthly credit card charges in batch mode with confirmation information and credit card batch information written to each transaction record.	
9.4	Process credit cards using the County's payment engine.	
9.5	Reports on credit card transactions to facilitate reconciliation and audit trails. Including rejected or declined transactions.	
9.6	Alerts and reports for expiring credit cards.	

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# **Marina Management System**

Miami-Dade County, Florida

9.7	Ability to resubmit rejected credit card transactions in one or more subsequent batches.	
	BUSINESS REQUIREMENTS	
1	MARINA WAITING LIST	
1.01	Provide functionality to email the waiting list application to the patron, download the application in a printable format, or allow the patron to apply online and view waiting list information via the County's portal and interface with the county's payment engine to receive payments.	
1.02	Provide waiting list functionality to allow a patron to apply for more than one marina, multiple slip sizes and/or multiple slip types at the same time.	
1.03	Provide a function to maintain eligibility criteria based on specific marina requirements.	
1.04	Provide the ability to set patron waiting list requirements and parameters.	
1.05	Provide a function to track efforts made to contact a patron on the waiting list.	
1.06	Provide the ability to track waiting list activity per patron.	
1.07	Provide a function to move patron information from the waiting list into an annual patron and generate an Annual Berth Permit.	
1.08	Provide functionality to generate reports to marina staff and management by slip type, slip size and placement.	

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# **Marina Management System**

Miami-Dade County, Florida

1.09	Provide functionality to generate patron correspondence such as a letter of ineligibility, movement on the waiting list, or mailing labels.	
1.10	Provide management reports identifying waiting list activity, revenue reports, or forecasting and turnaround reports.	
2	PROCESSING NEW BERTH PERMITS	
2.01	Provide functionality to be able to capture and maintain patron and boat information (must be able to track and maintain multiple boats for a patron).	
2.02	Provide a tickler process to generate new contracts for renewing patrons on a monthly basis. And to capture and maintain correspondence, rejection or approval notices, and renewal status (pending, approved, rejected).	
2.03	Ability to print renewal contract at the facility.	
2.04	Provide functionality to maintain and calculate monthly fees and apply charges to the patron's account on a monthly and/or prorated basis. And capability to apply different rates and/or fees to a patron's account.	
2.05	Provide functionality to calculate, maintain, and reimburse Security and Key Deposit information	
2.06	Provide functionality to automatically debit a patron's credit card, as well as, to be able to process a batch of credit card payments in one single run.	

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# **Marina Management System**

Miami-Dade County, Florida

2.07	Provide a financial function to process batch check deposits to be able to automatically post to patrons' accounts.	
2.08	Provide functionality to generate payment coupons, monthly statements, account history and mailing labels to mail out to patrons.	
2.09	Provide functionality to terminate a patron and track termination reasons/information.	
2.10	Provide functionality to convert delinquent or non-renewed patrons to transient status and rates if their vessel remains at the marina following termination from annual status.	
2.11	Provide reports on new annuals, renewals, terminations and current annual accounts.	
3	PROCESSING TRANSIENT SLIP REQUESTS (DAILY, WEEKLY, MONTHLY)	
3.01	Provide functionality to generate a transient contract for the length of stay.	
3.02	Provide functionality to calculate transient charges by day, week or month and take payment in advance of the stay.	
3.03	Provide functionality to apply promotional or discount rates to transient patrons.	
3.04	Provide functionality to track receipt and release of key deposit by patron and site.	
3.05	Provide functionality to refund a patron any charges and/or key deposits.	
3.06	Provide functionality to allow multiple bookings at any given time for a slip.	

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# **Marina Management System**

Miami-Dade County, Florida

3.07	Provide functionality to allow multiple bookings in temporary slips.	
3.08	Generate Check In and Check Out reports, reports identifying delinquent transient patrons, mailing labels and management reports to identify transient activity.	
4	MANAGING BOAT/SLIP MOVEMENT	
4.01	Maintain slip information such as slip type, slip size, and usability along with history of any changes to slip information.	
4.02	Provide a visual slip management function to easily move vessels from one slip to another slip either on the same dock or to a slip on a separate dock while maintaining slip history.	
4.03	Generate a Dock Check on a daily basis. The Dock Check should have the ability to breakdown by customer type and Dock. For example, all the annual customers on Dock A.	
4.04	Provide slip utilization reports by marina for a specified time period.	
5	MANAGING MARINA BOAT RAMPS	
5.01	Provide functionality to track Boat Ramp Pass information sold to patrons on a yearly basis.	
6	LANDING FEES	
6.01	Provide functionality to capture landing fees occurrences and future landings to include date, patron name, landing type (private or commercial) and amount.	
7	MOBILE DEVICES	

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# **Marina Management System**

Miami-Dade County, Florida

7.01	Provide the ability to interface with a wireless device that communicates real time with the central database or updates via synchronization.	
8	MANAGING DELINQUENT ACCOUNTS	
8.01	Calculate and automatically apply late fees to delinquent accounts.	
8.02	Generate statements and notices to send to delinquent accounts by mail, personal delivery and/or email.	
8.03	Transfer Security and/or Key Deposit information to patrons account to pay for any unpaid balances when terminating.	
8.04	Alert marina staff of patrons' delinquent status.	
8.05	Generate correspondence informing patrons of delinquent status, and termination notices as appropriate.	
8.06	Generate management reports showing loss of revenue, and outstanding fees due by delinquent patrons.	
8.07	Track and transfer delinquent account balances to AR.	
9	PROVIDE POINT OF SALE MODULE (POS)	
9.01	Capture and maintain fees, rates and merchandise inventory and inventory valuations.	
9.02	Process End of Day Blind Close Out function.	
9.03	Generate daily summary reporting by site of transactions by type, general ledger account, sales tax status, payment type, credit card type and by customer.	

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# **Marina Management System**

Miami-Dade County, Florida

9.04	Generate daily detail reporting by site of transactions by type, general ledger account, sales tax status, payment type, credit card type and by customer.	
10	PROCESS REFUNDS	
10.1	Functionality to validate key deposit refund requests and process them in accordance with departmental policies.	
10.2	Process to refund security deposit and account credit balances in accordance with departmental policies.	
10.3	Generate daily check request and refund transaction reporting.	
11	PROVIDE SEARCH FUNCTIONALITY	
11.1	Provide functionality to search by patron name, account number, ID, boat name, slip number or registration number; provide interface to Florida boat registration database.	
12	CUSTOM REPORTS	
12.1	Provide a user-friendly interface to allow users to create custom reports.	
13	GROUP LEVEL SECURITY	
13.1	Provide security configurable both at table and field level for marina management, staff and administration in accordance with departmental policies.	
14	PROVIDE APPROVAL PATH	
14.1	Provide approval paths for transactions such as refunds, security and key deposit returns, discounted rates, rebates and promotional considerations in accordance with departmental policies.	

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# **Marina Management System**

Miami-Dade County, Florida

14.2	Provide override capability for transactions such as imposition late or delinquency fees with appropriate approval paths in accordance with departmental policies.			
15	PROVIDE AUDIT TRAILS			
15.1	For every record created or updated the application must be able to provide the name/user if of the user that created the record, and the date and time the record was created/ modified.			
15.2	Provide reporting to track changes such as rates or slip information by user.			
15.3	Provide reporting to track issuance of credits, adjustments, rebates, refunds and promotional discounts by user.			
	TECHNICAL REQUIREMENTS			
1.0				
16	TECHNICAL REQUIREMENTS			
16.1	Include all new updates to the system and major releases of the software as part of the proposal.			
16.2	Support for 3rd party software integration such as Oracle and Microsoft SQL Server databases with full access to schema information and data.			
16.3	Provide ad hoc reporting and data export capabilities.			
16.3	Provide ad hoc reporting and data export capabilities.  Provide test environment for training and in-house development.			
	Provide test environment for training and in-house			

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# **Marina Management System**

Miami-Dade County, Florida

16.7	Provide technical assistance to Miami-Dade County and Parks & Recreation during implementation.	
16.8	Provide onsite end user training to Marina and Finance staff and management.	
16.9	Provide technical training to assigned county personnel (technicians, systems analysts/programmers and power users).	
16.10	Provide documentation on all hardware requirements necessary to implement application.	
16.11	Provide all application documentation as it applies to system functionality.	
	ADDITIONAL REQUESTS	
17	ADDITIONAL REQUESTS	
17.1	Ability to submit renewal requests for berth permits online	
17.2	Fuel dock management	
17.3	Email/text alerts	
	a. Send email to customers based on parameters (i.e. email every patron in dry storage	
	b. Integrates with mobile application and Microsoft outlook	
	c. Confirms reservation details	
	d. Notifies customer of status changes	
	e. Reminders sent to reduce no-shows	
	f. Bulk-messaging for special events	
17.4	POS Reservation system	

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# **Marina Management System**

### Miami-Dade County, Florida

	a. Media Room Rental	
	b. Shelter Rental	
	c. Boat Rental Reservation-Skipper at Pelican (viewing availability only)	
	d. Transient Dockage Reservations (viewing availability only)	
	e. Sufficient Open Fields for Expansion or Add-ons	
17.5	Maintain list/payment of private registered boat service and repair techs.	
17.6	Gate system integration.	
17.7	Utility integration.	

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### **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

# 2.8 <u>DESIRED MAINTENANCE AND SUPPORT, FUNCTIONAL REQUIREMENTS, NETWORK, AND TRANSACTION LOAD TEST</u>

#### 2.8.1 Maintenance and Support Pricing

The County prefers that the Software Maintenance fees be adjusted based on actual deployment. If new licenses are purchased during different phases, the County prefers that the maintenance fees be pro-rated to make them coterminous with the maintenance of the original licenses purchased. The County prefers software maintenance that is coterminous with the fiscal year.

Furthermore, the County prefers to pay for software maintenance and support for the actual number of licenses deployed and being used during any one-year maintenance and support renewal period. At the beginning of each maintenance renewal period, the County would like to have the right to adjust the number of licenses kept under maintenance according to actual usage, without incurring any type of additional fees or penalties if the number of licenses under maintenance is to be reduced based on usage.

#### 2.8.2 Technical Support Services

Technical Support - Help Desk Services

Live support for all severity levels available 24 hours a day, 7 days per week. The County desires an escalation and response time as listed below:

Severity	Definition	Response Time	Resolution Time	Status Frequency Update
1=Critical	A major component of the System, whether hardware or software, is in a non-responsive state and severely affects Users' productivity or operations.  A high impact problem which affects the Users.	15 minutes	One (1) Hour	15 minutes
2=Urgent	Any component failure or loss of	One (1)	Four (4)	30 minutes

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## **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

Severity	Definition	Response Time	Resolution Time	Status Frequency Update
	functionality not covered in Severity 1, which is hindering operations, such as, but not limited to: excessively slow response time; functionality degradation; error messages; backup problems; or issues affecting the use of a module or the data.	Hour	Hours	
3=Importa nt	Lesser issues, questions, or items that minimally impact the work flow or require a work around.	4 hours	Twenty- four (24) Hours	Four (4) Hours
4=Minor	Issues, questions, or items that don't impact the work flow. Issues that can easily be scheduled such as an upgrade or patch.	8 hours	72 hours for an acceptable work around until final resolution	Weekly Status Call

### 2.8.3 Network, Transaction Load Test, and Security Scan

The selected Proposer will be required to conduct a Transaction Load test, which simulates the volume of transactions using performance testing tools provided with the Solution. This is to be factored into the proposed implementation timeline and price proposal.

Prior to Final Acceptance, the Solution must pass the following mutually agreed upon Acceptance Tests: Hardware Functionality, Data Load, Module Functionality, Third-Party Integration, Reliability and Response Time Tests and Security Scan. Final Acceptance will be dependent upon a fully functioning, operational Solution as specified in this Agreement and "Scope of Services."

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### **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

#### 2.9 OPTIONAL FUNCTIONAL REQUIERMENTS

Proposers are encouraged but not required, to offer "Optional Functional Requirements." If a Proposer offers "Optional Functional Requirements", it must use the attached Form B-1, Section D, "Optional Functional Requirements." The "Optional Functional Requirements" are considered optional services not included in the Scope of Services or cost proposal. These optional services may be contracted at the sole discretion of the County throughout the resultant contract term.

Proposers should indicate their capability of fulfilling each *OPTIONAL* functionality below. In order to respond to each optional requirement, the Proposer is requested to enter a code in the space provided that best corresponds to the intended response for the requests listed. Comments that further clarify how the requirement is met should be included in the Response Comments column as well as your proposal response. The below table is to be included with your Proposal Submission package as further outlined in Section 3.0 "Proposal Submission Package".

Optional functionality and related services <u>will not be evaluated and scored</u> by the Evaluation/Selection Committee.

The acceptable codes are as follows:

- "Y" "Yes" Requirement will be <u>FULLY</u> met with the proposed solution (without code customizations, additional scripting, or additional code).
- "V" "Vendor" If the proposed solution requires third party software or services to fully meet the requirement, please include documentation showing how the Proposer will fulfill the request, including any alliances with other suppliers or use of third party software.
- "N" "No" Requirement will not be met and why. A blank or N/A in any box will be interpreted as an "N". This will not automatically disqualify the Proposer's response.
- **"G" "Configuration" –** Subject matter expertise on the proposed solution is required in order to configure the solution to meet the requirement. In the Proposal response, please in detail the nature of the configuration. Cross-reference any attached documentation in the response.

#### This is not an advertisement.

### **Marina Management System**

Miami-Dade County, Florida

RFP No. "TBD"

**"F"- "Future"-** Indicates that the requested functionality will be released with next major update to the solution. Proposer must include the anticipated date of availability.

**"C"** - **"Custom"** - Indicates that the requested functionality can be accommodated through a software customization. In the Proposal response, please provide a proposed start date, completion date, and any additional costs associated with the development of the request. Cross-reference any attached documentation in the response. Customizations typically should only apply to County specific integrations.

### 2.10 OPTIONAL PROFESSIONAL SERVICES, PRODUCTS, AND MAINTENANCE

#### 2.10.1 Optional Professional Services

Proposers are encouraged but not required, to offer "Optional Professional Services, Products, and Maintenance Support." If a Proposer offers optional services it must use the attached Form B-1, Table E1, "Optional Professional Services." The "Optional Professional Services, Products, and Maintenance Support" are considered optional services not included in the Scope of Services to be contracted at the sole discretion of the County.

### 2.10.2 Optional Software Products Not Included In Proposed Solution

Proposers are encouraged but not required, to offer "Optional Software Products Not Included in Proposed Solution." If a Proposer offers optional products it must use the attached Form B-1, Table E2, "Optional Software Products Not Included In Proposed Solution." The "Optional Software Products Not Included in Proposed Solution" are considered optional products not included in the Scope of Services to be contracted at the sole discretion of the County.

# 2.11 OPTIONAL ENTERPRISE SOFTWARE LICENSE, MAINTENANCE SUPPORT, AND ESCROW FEES

Proposers shall provide all possible licensing models for their solution. If a Proposer offers an "Optional Enterprise Software License, Maintenance Support, and Escrow Fees", it must use the attached Form B-1, Section F, "Optional Enterprise Software License, Maintenance Support, and Escrow Fees." The "Optional Enterprise Software License, Maintenance Support, and Escrow Fees" are considered optional services not included in the Scope of Services to be contracted at the sole discretion of the County.

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# **Marina Management System**

Miami-Dade County, Florida

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Miami-Dade County, Florida

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### Appendix 1

# Miami-Dade County Information Technology Department Technology Model

Distributed Operating	Windows 2008 Enterprise Edition
Systems	> AIX 6.1 or Higher
Systems	Ret Hat Linux As 6 Or Greater
	> VMware
	<ul> <li>Oracle Unbreakable Linux 5.3 Or Higher</li> </ul>
	> OSX
Mainframe OS and	> Z/OS 1.11- upgrading to 1.13 in July 2012
OLTP	> Z/VM Release 6.2
02	<ul><li>Z/Linux SUSE SLES 11 Or Greater</li></ul>
	CICS V4R1
Database	Oracle Enterprise Edition Release 11.2.0.3 RAC Certified
	Systems (Enterprise Solution)
	AIX Oracle Non-RAC 11.2.0.2
	MS SQL 2008 Enterprise 64 bit
	Oracle MySQL for Wordpress and PHP solutions
Hardware	▶ IBM Z Series mainframe (2 IBM 2098-E10/P03) – 7 LPARS – 2
	VM partitions virtualizing Z/Linus Servers
	HP model servers with Integrated Lights Out (ILO)
	HP blade server with VIO option
	HP blade servers with CITRIX XenServer for XenApp virtualization
	HP blade servers with CITRIX Xen Server for XenDesktop
	virtualization Wintel servers with VMWare virtualization
	software
	<ul> <li>HP Proliant dual core servers</li> </ul>
	➤ IBM pSeries servers (model 9119-FHA known as a p595) and
	IVR 9131-52A known as p520Workstations - preferred
	manufacturer (Dell)
	Thin Client Workstations – WYSE C10LE
	<ul> <li>Mobile Devices – Blackberries, iPhone, iPad, Android</li> </ul>
Network	Fiber channel (BROCADE Fiber switches – Fe1, Fe2, Fe4, Fe40)
	TCPIP Communications Protocol

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	>	Network Switches
	>	Telephone Switches
	>	Telephone Equipment
	>	DSL
	>	FiCon
	>	SolarWinds
	>	EdgeSight monitoring
	>	Remote locations connected to central County location with
		varying speeds from ADSL 256kbps to 1gbps for core sites
	>	Microsoft DNS
	>	Citrix SSL VPN
	~	Citrix Access Gateway
Storage		Tier 1 SAN storage – IBM DS 8100, DS8300
	>	Tier 2 SAN Storage – HP HSV SANS with Fiber Channel
	>	Tier 3 SAN Storage – HP HSV SANS with FATA high density low
		performance disk
	>	Tier 1 Tape Storage – SUN/STK SL8500 – 9940B Tape Drives
	~	Tier 2 Tape Storage – SUN/STK SL500 – LT02, LT04
Storage Management		Veritas NetBackup 6.0 for all distributed systems backups
	>	Veritas Cluster Series
	>	Veritas Global Clusters
	>	Veritas Global Replicate
		Veritas Volume Manager
		AIX Power-HA formerly HACMP 6.1 or greater
		IBM-HSM for mainframe backup and recovery
		Innovation FDR for mainframe backup and recovery
		CA/Disk for mainframe backup and recovery
Security		RACF (mainframe security)
		Trend Anti-Virus for servers
Distributed	>	ASP.NET
Application	>	Visual Studio 2008 (VB & C#)
Development	>	Rational Application Developer
	>	Rational App Scan
	>	.Net Framework 1.1, 2.0, 3.0, & 3.5
	>	J2EE JDK 1.4
		Objective-C for iOS SDK
	<u>&gt;</u>	
Applications Desktop	~	Microsoft Outlook 2007 or higher

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& Enterprise	>	Microsoft Internet Explorer 7 & 8		
	>	MS Office 2007 or higher		
	$\triangleright$	Citrix (Thin Client Access – Citrix Metaframe)		
Enterprise	<b>A</b>	PeopleSoft ERP using WebLogic and Tuxedo		
Applications	>	ESRI software products for GIS (ArcGIS Server, ArcSDE, ArcInfo,		
		ArcEditor, ArcIMS)		
	>	Infor Asset Management		
	>	MicroSoft Exchange		
	~	Documentum Electronic Document Management System		
Middleware	>	IBM MQ Message Broker and Workflow		
	>	WebSphere Application Server 6.1		
	>	IIS 6.0, & 7.0		
		Microsoft Office SharePoint Server 2010		
	>	WebSphere Portal Server		
	~	Shadow z/Services for CICS		
Systems and Asset	>	HP Insight Manager/SIM (for HP hardware management)		
Management	>	HP Continuous Access Replicator		
	>	MS SCOM, MS SCCM		
	>	Enterprise Network & System Management		
		IBM Tivoli Monitoring		
		<ul> <li>IBM Tivoli Network Manager</li> </ul>		
		<ul> <li>IBM Tivoli Netcool Omnibus</li> </ul>		
		<ul> <li>IBM Tivoli Composite Application Manager for</li> </ul>		
		Transactions		
		IBM Tivoli Composite Application Manager for SOA		
		<ul> <li>IBM Tivoli Composite Application Manager for WAS</li> </ul>		
		<ul> <li>Tivoli Application Dependency Discovery Manager</li> </ul>		
		<ul> <li>IBM Tivoli Change and Configuration Management</li> </ul>		
	_	Database (Maximo)		
		Scheduling Software Tivoli Workload Scheduler (OPC) – all		
		platforms		
Data and Information	>	SQL Reporting Services		
Management	<b>&gt;</b>			
	>	,p		
	>	IBM Cognos BI 10.x on Z/Linux for Business Analytics		
	>	0		
User Identification and		Active Directory		
	~	Tivoli Identity Manager		

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Authentication	➤ RACF for Z/OS

# Miami-Dade County Information Technology Department Technology Model – Database Systems

#### **Background:**

ITD provides Database services for applications on five distinct DBMS platforms, of which only 2 are approved for new system development or implementation of new vendor packages.

- The CA-IDMS mainframe based DBMS running under MVS is available only for maintenance and minor enhancements of existing legacy applications.
- The IBM DB2 mainframe based system is a turnkey database used exclusively for On-Demand report management on the mainframe and further development is not allowed.
- The IBM UDB distributed database on the AIX platform is used exclusively as a turnkey DBMS in direct support of specific IBM products that do not support our standard new systems RDBMS platforms. No development is allowed on this RDBMS platform.
- For new system development or implementation of vendor packages the two DBMS platforms are MSSQL and Oracle. An architectural review would be needed to determine the best DBMS platform for any given application. Factors used to determine the best DBMS platform include, but are not limited to, number of users, data type, total database size, transaction counts, DR, COOP, HA and multi-site co-processing requirements, integration(s) with other systems, internet vs. intranet usage, mainframe legacy interface, and reusability of existing enterprise components.
  - o The MSSQL DBMS runs on the Windows 64 bit platform.
  - The Oracle RAC RDBMS system on the Redhat Linux; non-RAC Oracle DBMS runs on AIX platform. Application databases that are CPU and/or I/O intensive are best suited for the AIX Oracle platform.

ITD Infrastructure Current Technology Model Database Systems

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#### **Current Release Levels by Product:**

IDMS Release 17.0 running on IBM ZOS release 1.11 moving to 1.13

DB2 Release 8 running on IBM ZOS release 1.11 moving to 1.13

UDB Release 8 to 9 running on AIX release 5.3 moving to 6.0

MSSQL MSSQL Enterprise 64 bit running on Windows 64 bit HP Servers

Oracle Oracle Enterprise Edition Release 11.2.0.3 RAC Certified Systems running

on Linux Redhat release AS 6 or higher on HP servers or AIX release 6.1

Oracle Edition Release 11.2.0.2 – Partitioning is not available.

#### **Current Infrastructure Configuration:**

For purposes of this document the IDMS DB2 and UDB infrastructure configurations will not be described since new development or new systems installations are not authorized on these platforms.

#### **MSSQL**

The current County-wide shared platform consists of:

- In the Production environment 2 sets of clustered servers each consisting of 2 HP servers with 2 dual core processors running Windows 64 bit and MSSQL 64 bit.
- In the Test environment 1 set of clustered servers consisting of 2 HP servers with 2 dual core processors running Windows 64 bit and MSSQL 64 bit.
- Planned implementation of a mini-warehouse cluster consisting of 2 HP servers with 2 dual core processors running Windows 32 bit and MSSQL 32 bit. This platform will also support legacy link services between MSSQL to Oracle. Due to the inherent stability issues of this type of link service, current legacy systems requiring this service are located in this infrastructure with lower than 95% availability expectations.
- Planned implementation of a small Disaster Recovery Stand-by cluster to be located at the NAP consisting of 2 HP servers with 2 dual core processors running Windows 64 bit and MSSQL 64 bit.

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### **Current Infrastructure Configuration (cont.):**

Oracle

The current County-wide shared platform consists of:

- Two Production Multi-Node Oracle RACs consisting of multiple HP 2 dual core servers running Redhat Linux for DBMS systems that fully conform to County standards of operation.
- One Test Multi-Node Oracle RAC consisting of multiple HP 2 dual core servers running Redhat Linux.
- One planned Production Multi-Node RAC consisting of multiple HP 2 dual core servers running Redhat Linux for DBMS systems that do not fully conform to county standards of operation.
- One planned Test Multi-Node RAC consisting of multiple HP 2 dual core servers running Redhat Linux for DBMS systems that do not fully conform to County standards of operation.
- One planned Production Standby and Co-processing Multi-Node RAC consisting of multiple HP 2 dual core servers running Redhat Linux located at the NAP for DBMS systems that require either standby Disaster Recovery operations or require full 24x7 co-processing systems.
- Two planned Production Multi-Node Oracle RACs consisting of multiple HP 2 dual core servers running AIX for DBMS systems that fully conform to County standards of operation.
- One planned Test Multi-Node Oracle RAC consisting of multiple HP 2 dual core servers running AIX.

Within the County-wide Oracle platform customers may select service levels as follows:

- Standard availability 7 a.m. to 7 p.m. Monday to Friday Non Mirrored Storage
- Standard availability 7 a.m. to 7 p.m. Monday to Friday Mirrored Storage
- 24 x 7 availability Non Mirrored Storage
- 24 x 7 availability Mirrored Storage
- 24 x 7 availability Mirrored Storage with offsite standby databases
- 24 x 7 availability Mirrored Storage with two site co-processing databases

The County also maintains application specific infrastructures in the AIX and SUN Solaris environment for specialized use systems such as GIS, EDMS, ERP and the like.

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# ITD Infrastructure Current Technology Model Database Systems

#### **Restrictions of Use:**

The following general restrictions of use apply to all platforms.

- Access to Production is locked down for access by pre-programmed application sets only.
- Application systems or users are not authorized the use of system administrator or database owner privileges in the production or test environments. Database or Schema Owner privileges are allowed in the test environments when requested.
- Users connecting to the database through the applications must do so with a
  unique userid known to the DBMS system. The application must encrypt the
  password in such a way that the particular user id cannot be used for logon
  through some other third party tool using an ODBC connection such as Toad or
  MS Access.
- Applications requiring data auditing must include auditing within the application.
- Databases or portions thereof may not be transported offsite or copied to test systems without the expressed authorization of the ITD Security Administrator.
- The database infrastructure is dedicated exclusively to managing requests for data contained in the database. Application program sets are not authorized execution in DBMS specific infrastructure. Limited availability of an application specific FTP area will be considered when no other option is available.
- All systems are subject to review and possible denial of service of high resource using SQL statements that impact other users or applications. The database support staff is available to assist application developers in pinpointing problem areas and suggesting possible improvements or design changes to alleviate these high resource SQL queries.
- Any application whether vendor supplied or developed by County staff must provide certification of use on new vendor releases or patches no more than 90 days after the DBMS provider announced General Availability Date. Any DBMS vendor security patch must be immediately certified for use by the application and will be applied as soon as is feasible upon DBMS vendor release.
- The County will not provide support to any database that is not on the current supported release level of the DBMS vendor.

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#### Miami-Dade County, Florida

- Storage for databases are provided exclusively through SANs (Storage Array Systems) provided by both HP and IBM devices.
- Images and text documents are not authorized for storage in a database.
- Changes to Production must follow currently published ITD Change Management procedures.
- For the convenience of our customers and for planning purposes a service lead time table is provided for the typical requests for service at <a href="http://database">http://database</a>
- See Database Security Policies for further usage restrictions.

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# ITD Infrastructure Current Technology Model Database Systems

#### **Restrictions of Use (cont.):**

#### **MSSQL**

- Previously known as DTS processing now under the name of SSIS (SQL Server Integrated Services) is not a clustered application. Therefore availability of this service is not guaranteed.
- Mirrored storage is not provided in the MSSQL infrastructure.
- Applications requiring data encryption must include encryption modules within the application.
- Link services between SQL to Oracle are not provided (however Oracle to SQL link services are provided).
- SQL Report services are not supported as an operational component within the County-wide SQL database infrastructure.

#### Oracle

- All Systems targeted for the RAC must be RAC Compliant at the current release level supported by the County infrastructure.
- Only Oracle features available from the Oracle Enterprise Edition are available for use. The Oracle Key Features Summary (below) outlines those features that are currently supported.
- Standby and co-processing databases are limited to like infrastructures for the master and standby systems or the co-processing infrastructure.

Oracle Key Feature Summary	<u>Enterprise</u> <u>Edition</u>
Windows	Not
	Supported
Linux	Supported
Unix AIX	Supported
64 Bit Support	Supported
Total Recall	\$Option

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<u>Midini-Dade County, Florida</u>	KEE INO. IDD

Active Data Guard	\$Option
Fail Safe	Supported
Flashback Query	Not
	supported
Flashback Table, Database and	Not
Transaction Query	supported
Oracle Secure Backup	Not
	supported
Server Managed Backup and Recovery	Supported
Real Application Clusters	Supported
Integrated Clusterware	Not
	supported
Automatic Workload Management	Not
	supported
Java, PL/SQL Native Compilation	Supported
Oracle Database Vault	\$Option
Oracle Audit Vault	Not
	supported
Oracle Advanced Security	\$Option
Oracle Label Security	\$Option
Secure Application Roles	Supported
Virtual Private Database	Supported
Fine-Grained Auditing	Supported
Proxy Authentication	Supported
Data Encryption Toolkit	Supported
Oracle SQL Developer	Supported
Application Express	Not
	supported
Java Support	Supported
Comprehensive XML Support	Not .
/a	supported
PL/SQL and Java Server Pages	Supported
Comprehensive Microsoft .Net Support,	Supported
OLE DB, ODBC	<b>60</b>
Real Application Testing	\$Option
Enterprise Manager	Supported
Automatic Memory Management	Supported
Automatic Storage Management	Supported

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Automatic Undo Management Advanced Compression OLAP Partitioning Data Mining Transportable Tablespaces, Including Cross-Platform Star Query Optimization Information Lifecycle Management	Supported \$Option \$Option \$Option \$Option Not supported Supported Not
	supported
Summary Management - Materialized	Not
View Query Rewrite	supported
Oracle Warehouse Builder	\$Option
Oracle Streams	Supported
Advanced Queuing	Supported
Workflow	Not
	supported
Distributed Queries/Transactions	Supported
XML DB	Not
Multimedia	Supported Not
Text	supported Not
Locator	supported Not
Spatial	supported \$Option
Secure Enterprise Search	Not
	supported

\$Option

Oracle Content Database

<sup>\*</sup> Supported = Currently supported by the County

<sup>\*</sup> Not Supported = Currently not supported by the County - Additional Funding may be required for Support Staff.

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RFP No. "TBD"

\* \$Option = Currently not supported by the County - Additional Funding for Licenses and Support Staff Required

# Miami-Dade County Information Technology Department Hosting Requirements

ITD will provide Enterprise Hosting Facilities and Technical Support to the Customer for monitoring and maintaining operations of infrastructure environments to include Application support.

### Concept of Operations

- Refer to *Technology Model* document for supported hardware/software components.
- Changes to the Production environment shall be introduced through the change management procedures as described by the section *Change Management Process* in this document.
- The Customer's Test and Staging Environments will be hosted and supported by ITD; notification of downtime will be provided with as much advance notice as possible.
- All user-ids must be unique and created using the Miami-Dade County Central Registration System (CRS).
- Requested modifications in a shared environment may be restricted during prime time given their potential requirement for large system resources to execute. Changes of this nature will be scheduled at a time mutually agreed upon.
- Applications to be deployed to the Websphere Application Server (WAS)
  environment must be packaged for deployment using the Websphere Deployment
  Manager. For preparation of applications to be deployed on WebSphere
  Application Server see:

http://publib.boulder.ibm.com/infocenter/wasinfo/v6r0/index.jsp?topic=/com.ibm.web sphere.express.doc/info/exp/ae/tatk create ear.html

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#### Miami-Dade County, Florida

- ITD does not offer any type of remote shell access under any circumstances, including TELNET, Secure Shell Protocol (SSH), Secure File Transfer Protocol (SFTP) or Secure Copy Protocol (SCP).
- ITD is restricted from implementing changes during periods of "moratoriums" such as during countywide Elections and Tax Collection season. These moratorium periods are well established ahead of time and enforced through the *Change Management Process*.
- Vendors and contractors will be made aware of previously established production on-call procedures and will be asked to comply with them.
- Vendors must provide minimum hardware requirements.
- Vendors must provide recommended architecture.
- Vendors must have in-house staff with knowledge on technologies listed on the *Technology Model* document for system set-up and support.
- For vendor owned equipment housed in County facility (co-located) where the vendor supports and maintains the equipment while the County provides electricity, air conditioning and may swap out tape trays for backups:
  - > For Intel-based equipment
    - Equipment must be rack mountable.
    - County can provide virtualized servers within the shared services infrastructure based on vendor supplied configurations.
  - For non Intel-based equipment
    - An environmental analysis will need to be conducted before the County can determine if space and the associated environmental requirements are available.
  - GSA (General Services Administration) will provision electricity at an associated cost.
  - All the currently billable costs for network connectivity to Metronet still apply.
  - County does not endorse equipment that requires stand-alone tape backup trays and prefers that the vendor solution can be integrated within the existing Veritas NetBackup shared infrastructure.

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#### **UNIX/Linux Environment**

- Administrator and UNIX/Linux root privileges are limited to ITD Technical Support staff.
- rootvg volume group will not be used to house any databases or any non-operating system data. Databases, application data and logs will be stored in file systems created outside of rootvg.
- Installation of software that needs to be installed as root needs to be performed by or conjunction with ITD Technical staff.
- Application software is prohibited to run as root.
- O/S rootvg will be mirrored between 2 different physical disks.
- Applications must supply Startup and Shutdown scripts for both normal Startup/Shutdown and Emergency Shutdown.
- All connectivity to servers is accomplished through SSH. The following protocols are disabled Telnet, rsh and rcp.

#### **Database Management**

- Access to the Production database environment with DBA/SA privileges is limited to the ITD authorized database support.
- It is the responsibility of ITD DBA staff to migrate new database objects to the production database (at times deemed appropriate).
- The application must encrypt the password in such a way that the particular user-id cannot be used for logon through some other third party tool using an Open Database Connectivity (ODBC) connection such as TOAD or Microsoft (MS) Access.

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#### Miami-Dade County, Florida

RFP No. "TBD"

• Databases or portions thereof may not be transported offsite or copied to Test systems without the expressed authorization of the ITD Security Administrator.

#### **Disaster Recovery**

 Unless special provisions are made in advance for the implementation of Disaster Recovery/Business Continuity measures, Customer understands that recovery of IT hardware or data assets from this facility may not be possible. If recovery at ITD is possible, it will be on a best effort basis.

### **Security Requirements**

- Operating system security patches are applied as soon as they are made available through an automated process. Custom patching windows can be created to accommodate availability needs.
- All systems will undergo initial application and host vulnerability scans, prior to being placed into production. High severity applications and systems vulnerability issues identified must be corrected prior to the system being placed into production. The County utilizes multiple vulnerability scanning products including but not limited to Qualys, WebInspect, Rational AppScan and MetaSploit.
- Regularly scheduled periodic rescans will be performed on the system and any deficiencies or vulnerabilities identified must be immediately remediated.
- Application vulnerability rescans must be requested of all new or updated application code prior to release to production. All critical vulnerabilities must be remediated before the application code will be authorized to be migrated to the production environment.

#### Software Release Levels Supported

 All vendor-supplied software supported by ITD must have an active vendor maintenance agreement and must be kept up to current release levels. Operating system security patches are applied as soon as they are made available

#### Software License Renewal

• ITD will manage all infrastructure licensing and maintenance contracts. Versions of software which are not supported by the vendors will not be supported by ITD.

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#### **Application Test/Staging Environment**

- All systems must have at least a Production and Test environment.
  - ➤ A Staging environment is recommended when multiple versions of system software and applications are required.
  - A separate reporting, batch or Staging environment can be established where there is a need and the budget allows it.
- Production and Test server-side software installation and upgrades will be performed by ITD staff and will follow ITD's *Change Management Process* 
  - ➤ Maintenance services will include correction of any defect affecting any of the components of the infrastructure. Resolutions of problems may be delivered in the form of a patch, maintenance update, procedural work around or installation of a new release. Some corrections may be required to be implemented immediately. In those instances, the *Change Management Process* may be expedited. Changes or patches dealing with Security vulnerabilities are expedited and must be treated as very high priority.
- Support services for the Test/Staging environments are available through ITD with on-site support between the hours of 8 am and 5 pm Monday through Friday, excluding County Holidays, unless coordinated in advance. The Application Test database environment is available with support from the on call staff from 7 am to 7 pm, Monday through Friday, excluding County Holidays, unless coordinated in advance. The Test databases are restricted environments; schemas passwords are not published. The Staging database is not restricted; schema passwords are published.

### **Preventative Maintenance and System Upgrades**

- The lengths of outages for non-routine maintenance are determined by the requirements of the maintenance procedure. Each outage will be planned and discussed at the weekly Hardware/Software Meeting held every Wednesday morning at 9 a.m. in the ITD Command Center Conference Room.
- All requests for software or hardware upgrades will be addressed in the Hardware/Software Meeting and must include a detailed plan.

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#### **Change Management Process**

All requests to modify the Production and Test environments, such as for new Application releases and patches will require a *Change Management Request* form to be submitted using the system of record at the time which includes a description and schedule of the change, outage period, areas impacted, back out plan and on call personnel.

#### Security

- Vendors will be required to:
- Provide the ability for each user to be uniquely identified by ID.
- Provide basic authentication through use of passwords.
- Provide the ability to enforce password expiration.
- Provide the ability to require automatic password expirations when initially assigned or reset.
- Provide ability to configure password parameters such as password lengths, user access to expiration settings and other behaviors, enabling alphanumeric characters, etc.
- Provide the ability to encrypt transmitted data and authentication information over internal and external networks.
- Provide support for Secure Socket Layer (SSL) 128 bit and 256 bit encryption.
- Provide a password database encrypted in storage.
- Provide ability to protect audit logs from unauthorized access.
- Provide ability to log activities performed by specific user ID and IP address and to date-time stamp all activities.
- Provide ability to identify and log all subsequent access points to ensure accountability is maintained throughout session.
- Provide ability to limit concurrent sessions.
- Provide ability to log changes to administrative functions.
- Provide ability to automatically archive audit logs.
- Provide ability to set an unsuccessful access attempt limit and suspend IDs after reaching the unsuccessful access threshold.
- Provide ability to send alerts to administrators for unauthorized access attempts.
- Enable automatic logoff of ID after a defined period of session inactivity, and perform subsequent re-log-on password authentication.
- Provide ability to lock out user or group ID by date or time.
- Provide centralized administration, user authorization, registration and termination.

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- Data that is protected through encryption is an individual's Personally Identifiable Information (PII). Items that may be considered PII include, but are not limited to, a person's:
  - > Full name (if not common)
  - Social Security Number or National identification number
  - > Telephone number
  - Street address
  - ➤ E-mail address
  - ➤ IP address (in some cases)
  - Vehicle license plate number
  - Driver's license number
  - Face, fingerprints, or handwriting
  - Credit card numbers or credit card account information (billing address, account name, expiration date etc.)
  - ➤ Bank Account Routing (RTN) and Account numbers
  - Digital identity

### Geographic Information System (GIS)

- ArcGIS/CITRIX Applications
  - ➤ Local application data that requires read/write access must be stored/and accessed from the centralized ITD CITRIX file shares. The application can not require the end user to write to the servers' hard drive.
  - ➤ End user application customizations must be stored in the end users profile under documents and settings.
  - ➤ Applications (including ArcGIS desktop extensions) must be compatible with 32bit as well as 64bit Windows Server operating systems.
  - Source code must be available.
- ArcGIS Server/ArcIMS Web Applications
  - ➤ Application must work with current version of ArcGIS Server/ArcIMS running in production servers or a newer planned upgrade version.
  - ➤ All applications should access data from ITD ArcSDE servers, and only specific datasets should be stored locally. A process should be implemented if data needs to be refreshed.
  - All errors should be written to a log folder in corresponding website directory created for each GIS application.

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#### Miami-Dade County, Florida

RFP No. "TBD"

➢ If application is found to contain errors that render it unusable or that present erroneous or misrepresented data, the GIS Web administrator will remove it immediately from production until such time as the application is fixed and tested successfully.

#### ArcGIS/ArcSDE Geodatabase Editing Applications

- ➤ All applications must work with the same version of the ArcGIS desktop suite that the County is using in its enterprise production environment or a newer planned upgrade version.
- Editing applications should be integrated with Miami-Dade Editing Extension in order to leverage the County's geodatabase versioning mechanism. ITD will provide documentation and required technical support.
- ➤ Editing applications should be deployed through CITRIX technology. If CITRIX is not a viable solution, the user department is responsible for the installation, maintenance and upgrade of software in users' workstations.
- ➤ The GIS ArcSDE geodatabase being edited by the hosted editing application should be loaded in a development instance and fully tested prior to its production implementation. ITD GIS staff will be responsible for loading the data from the development instance to production. A copy of the ArcSDE enterprise architecture document will be provided before data loading.

#### Batch Server Jobs

- ➤ Batch jobs must work with current version of ArcGIS desktop/SDE suite running in production servers or a newer planned upgrade version.
- All batch jobs must comply with the GIS standards for jobs development and ITD job naming conventions and scheduling procedures.
- Any temporary data should be created in the designated batch job folder within the Scratch Area.
- All errors should be written to a log folder in corresponding job directory created for each batch processing job.
- All applications should access data from ITD ArcSDE servers, and only specific datasets should be stored locally. A process should be implemented if data needs to be refreshed.

#### This is not an advertisement.

## **Marina Management System**

### Miami-Dade County, Florida

- > Jobs should be tested thoroughly in the development environment before a change management request is submitted to move job/job related components to the production batch processing servers.
- ➤ All changes to batch processing jobs in the production environment should be requested via change management procedures and should be implemented by the assigned GIS staff.